BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO: UNDOCKETED

In the Matter of

REVIEW OF TEN-YEAR SITE
PLANS OF ELECTRIC UTILITIES.
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PROCEEDINGS:	10-YEAR SITE PLAN WORKSHOP
BEFORE:	CHAIRMAN LISA POLAK EDGAR COMMISSIONER J. TERRY DEASON COMMISSIONER ISILIO ARRIAGA COMMISSIONER MATTHEW M. CARTER, II COMMISSIONER KATRINA J. TEW
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TIME:	Commenced at 9:30 a.m. Concluded at 12:56 p.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	JANE FAUROT, RPR Official FPSC Hearings Reporter (850) 413-6732

P R O C E E D I N G

CHAIRMAN EDGAR: Good morning. We will call this workshop to order, and I will begin by asking our staff to read the notice.

MS. FLEMING: Pursuant to notice issued by the Commission Clerk on August 9, 2006, this time and place has been set for the purpose of conducting a Commission workshop in the undocketed review of ten-year site plans.

CHAIRMAN EDGAR: Thank you.

We do have a brief agenda that I believe was attached to the notice when it went out, so I hope that everybody has a feel for the way the discussion is going to go this morning. We have asked the FRCC to summarize the regional load and resource plan and to give us an update of the evaluation of the interdependency of electric generation and natural gas pipelines.

We are going to spend the majority of our time at this workshop talking about transmission system issues, and we have asked the FRCC to lead us in that discussion and to make a presentation to us. And then later in the day we'll have presentations from Progress Energy, from Tampa Electric Company, and from Orlando Utilities Commission. And I will give an opportunity and ask if there is anybody else who would like to address the Commission on any of these issues.

This is a workshop. It is really one of the few

times that as a Commission we get to have an open discussion together and look ahead. This is an exciting time. It gives us an opportunity to think about and ask questions about and discuss the future in Florida. So I encourage everybody to ask lots questions and to take advantage of this opportunity for discussion. And there will be, of course, the opportunity to ask questions and discuss with our presenters. And I'll look to staff to help us get started.

MR. HAFF: Thank you, Chairman.

We are going to hear presentations from Ken Wiley of the FRCC. And we'll go in this order: Orlando Utilities Commission; Schef Wright, I understand, will be presenting for OUC; Progress Energy Florida, Sarah Rogers; and Tampa Electric Company, Ron Donahey, and they will go in that order after Mr. Wiley goes. And I will just turn it over to Mr. Wiley.

MR. WILEY: Thank you, Michael.

Commissioners, it's a pleasure to be here today. This is the first time that we have had such an extensive workshop with you, it has always been on the load and resource plan, and that's kind of going to be the minor point of our presentation today so we can get directly into the gas and the transmission issues. So, please -- I know we gave you a lot of slides here. I'm going to kind of hasten through a few of them. Please stop me if you have any questions so that we can get directly to the issues. And we'll see if I can operate

this computer.

Okay. Here we go. The first thing we'll talk about is the load and resource plan. And this slide shows our load growth going from 42,700 this year up to 53,000 in the year 2015. The bottom dashed line shows last year's forecast of this. And I hate to add that our chartmaker put the wrong data on this chart. The bottom line there is almost in alignment with that top line, and I apologize for that, but we will get updated slides to you after this presentation today. And this was for the summer. And this is the winter peaks out through the years 2015. And, again, the same problem with that bottom dashed line.

When we look at the amount of capacity that we are going to be adding over this 15-year period, you see that we're going from around 50,000 up to about 62,000 megawatts of capacity to serve the load that we just -- the demand that we just showed you. And this shows the makeup of that capacity in each of the years. And, please, if you have any questions, stop me at any time.

But the important thing behind those two statistics is this slide, and this is the reserve margin that we end up with for the summer and the winter peak periods of each of those years. And you will notice that in all of those years the reserve margin is at 20 or above 20 percent for every one of those years. And the red line you see at 15 is the minimum

reserve requirement that the FRCC requires. And you can see we are well above that minimum. And, as a matter of fact, I might add that this is in direct contrast to what we see in the continental United States. And I just saw some data from the North American Electric Reliability Council, NERC, as the acronym are used, that shows in this same time period that the reserve margins are going down significantly in the United States. And when you look at Canada, which is interconnected to us, it is even worse than the United States. And so I'm happy to report that this region is bucking that national trend.

So, in summary, the --

CHAIRMAN EDGAR: Mr. Wiley, just a moment.

Commissioner Carter.

COMMISSIONER CARTER: Thank you, Madam Chair.

Could you go back to the slide. What do you attribute that trend in terms of why it's going down everywhere in the United States and Canada versus what's happening in Florida?

MR. WILEY: Part of that trend is a reluctance in the out years for people to define what their planned units are. And I think that's part of the problem. Some of it is siting problems nationwide. In some of the regions of the country they are depending upon the market to site this, merchant type of generation in some of the regions of this country. So I

think it is a combination of a lot of those things. And as you know, in this region this Commission pretty closely controls what our reserve margin should be and has for quite a number of years. And I think that's one of the reasons that this state is staying up there is that this Commission is very active on this subject.

COMMISSIONER CARTER: Thank you, Madam Chair.

MR. WILEY: Your staff had asked us to address conservation that are in our plans, and we pulled out of our data base some information on how much conservation, cumulative conservation that we have saved over the years. And I believe this data probably goes back into the '80s when conservation was a very big-ticket item on this Commission's agenda. And we have kept data all of these years about the cumulative effect of that, and it is just interesting to note here the amount of energy, which is the green line, that has been saved due to conservation efforts in this state, and how much that translates into capacity. In other words, if it were a generator, and that is the blue line.

We're projecting that in the year 2015 that the cumulative effect of all the conservation in this state over all of these years would be approximately 3,000 megawatts of generation capacity and 2,500 gigawatt hours of electrical energy. And that's a pretty significant number.

MR. HAFF: Ken? I'm over here. Michael Haff over

here on this side.

Do you mean 7,000 gigawatt, is that the energy on the left?

MR. WILEY: Gigawatt hours is on the left, yes.

The other thing that we thought we would bring to your attention is the amount of renewable resources that has been reported to us. And as of this year, there is approximately 938 megawatts of renewable resources in the state of Florida in our region. And that is broken up mostly by municipal solid waste, wood waste, hydro and landfill gas. And that's 938 megawatts of capacity, which is a rather significant number. We thought we would bring that to your attention today.

COMMISSIONER ARRIAGA: A quick question. And this is renewable resources. What actions would you recommend we take to continue promoting investment in this area?

MR. WILEY: Commissioner Arriaga, I'm not the expert on that. I would prefer you direct that question to some of the electric utilities themselves. They deal in that. And that is not an active area that we get involved in. We get the statistics so that we can account for that kind of capacity, and I think I would be giving you a personal opinion rather than an industry opinion. I'm sorry.

COMMISSIONER ARRIAGA: Thanks.

MR. WILEY: When we look at the amount of energy that

comes from fuels, it becomes very interesting. In 2006, we see that, you see the pie chart on the left, that gas is producing 37 percent of the kilowatt hours produced in this state and coal 24 percent. When we project out on our plans for the year 2015, we see gas expanding to 44 percent of the electrical energy that is produced. And if all of those new coal units are built that would consume -- they would produce 32 percent of the electrical energy. And this is a chart that we are very interested in, and I would think that this Commission is very interested in. And with that, let me go quickly to the gas portion of that, of natural gas.

COMMISSIONER CARTER: Madam Chair.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: If you could back up to Slide 10 for a moment, please. On your fuel mix, I see you're going from 13 percent other in 2006 to 9 percent in 2015. What do you attribute that to?

MR. WILEY: The other category is mainly interchange purchases that we would purchase from outside of the state of Florida from other utilities. That is the big part of that 13 percent block. And as the pie expands for the next ten years and the number of kilowatt hours that we produce gets larger, even though the amount of energy that's produced by other stays closely the same, it just becomes a smaller piece of the pie in the next ten years. So we don't see a reduction in the actual

number -- to say it another way, we don't see a significant reduction in the amount of kilowatt hours that are produced by these other things, or by interchange, we just see that it's not growing. And, therefore, in future years it becomes a smaller piece of the pie percentage-wise.

COMMISSIONER CARTER: Follow-up, Madam Chair.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: What about other types of sources of energy, solid waste, you know, hydro, e-grass, is that factored in here on your --

MR. WILEY: Yes, sir, that is in that other category. It would be landfill gas, wood chips, hydro, any of the sources of energy that are not in the other parts of this pie.

COMMISSIONER CARTER: But what I'm trying to get at is why -- is there some way for me to understand why that's going down? I mean, with all of our expansion and requests for other types of sources for energy, that's going down from 13 percent currently to 9 percent. I understand it's probably a greater capacity and demand, but wouldn't that be a greater perspective as well for alternative sources?

MR. WILEY: Well, I guess what we're reporting to you is that the plans that we receive through all the ten-year site plans and the knowledge that we have do not show a material increase in this other category.

COMMISSIONER CARTER: Thank you, Madam Chair.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: And that statement from Commissioner Carter brings me to the last leg that I was asking you about, because we seem to be trying to motivate the investment in renewable resources in order to break this pie chart into a more equitable issue here. And what we see, as Commissioner Carter has pointed out, is a decrease in what we're trying to promote, that would be a statement that I'm making, and a concern for our staff.

Because I don't see in this projection any reflection on the policy that we are setting in this Commission. And one question would be: Two companies have already indicated that they are making or they plan to make important investments in the nuclear generation and I see also a decrease in nuclear. Why would that be?

MR. WILEY: That would be the same reason that we discussed for others. Actually, even though people are looking at nuclear options in the future, there are none that are planned. And our data and our numbers do not report any new nuclear units in this ten-year time frame. So we don't reflect any initiatives that are going on by two of the companies in this state to do that.

COMMISSIONER ARRIAGA: Would it be fair to say then that next year when you present the slides those numbers would change?

MR. WILEY: It would be my fondest wishes to see some nuclear plants committed in the state, yes, sir, so that we can get that green piece of the pie on gas dropped down a little bit percentage-wise.

COMMISSIONER ARRIAGA: Well, we share the same concern.

MR. WILEY: Yes, sir, we do, very much so.

COMMISSIONER ARRIAGA: Thank you.

MR. HAFF: Chairman, if it is your pleasure, there are individual utility members in the audience who may want to continue this dialogue, if you wish to do that now, or whatever your pleasure is.

CHAIRMAN EDGAR: I think we'll continue that discussion when we call upon them later in the morning. Thank you.

Okay. Mr. Wiley.

COMMISSIONER DEASON: Madam Chairman.

CHAIRMAN EDGAR: Commissioner Deason.

COMMISSIONER DEASON: To the other category again, Mr. Wiley. Would it be fair to say that the main driving force of that category is the rather static import capability and the fact that with just the overall growth that we see in demand that it's going to be a smaller portion of the overall generation mix in 2015. Is that a fair characterization or not?

MR. WILEY: Yes, it is. The import capability, electrical import capability into this region is 3,600 megawatts. And we have contracted roughly 1,700 of that to purchase energy from outside the state, and plus we have about 800 megawatts of generation outside the state that is owned by utilities in the state. So that says that we have firm capability, firm energy coming into the state in the amount of -- and these are round numbers, 2500 megawatts, which means there is only about 1100 megawatts more growth for new firm energy transactions into the state as we go through time.

COMMISSIONER DEASON: And in the other categories, you said earlier that it includes renewables. Even though we see a reduction in the overall percentage of other, is there not actually an increase in the absolute amount of renewable energy that is going to be produced in 2015 as compared to 2006?

MR. WILEY: I don't have the answer to that at my fingertips, Commissioner.

COMMISSIONER DEASON: Could you supply that to staff?

MR. WILEY: Yes, we will do that.

We felt that we ought to discuss a little bit more the amount of natural gas that we are using in this state. And when you look at the amount of electrical energy that was produced from natural gas historically we were in the 18, 19 percent arena ten years ago. And you can see how that has now

grown as of last year to 33 percent. When natural gas was only serving 20-ish percent of this energy in this state, that didn't present a tremendous reliability problem to our region. But now when you look at the projections, we see this going up to above roughly 50 percent by the year 2010. And when some projected coal units come on-line in the 2013 and '14 time period, you begin seeing that our dependence on natural gas is going back down a little bit to a projected 44 percent of the total. That is still a significant source of fuel into this region, and we wanted to make sure that we pointed that out to you today. The net effect of all of this load and resource plan is that we feel that the region does have an adequate resource over this next ten-year period.

And so that kind of concludes our presentation on the load and resource plan this morning, and I'll just go right on into the next agenda item, which is discussion of the natural gas pipeline, if there are no questions?

CHAIRMAN EDGAR: Okay. I think we're ready.

MR. WILEY: I wanted to start off by showing you the main pipelines that come into our region. This map of the pipelines does not show the Southern gas pipeline up in the northeast portion of the state. One of these days that will become significant, but at the moment the pipes that I'm showing you on this map are the significant ones that we are in the process of studying. And what we see here is three pipes

on the Florida Gas Transmission network, and those are in red, coming in from the panhandle, coming in from Louisiana and the Texas region. There is quite a network of pipelines to the west of us. But into Florida we see three pipes.

One of those pipes -- and, Florida Gas, our Gulfstream people, please feel free if I mischaracterize any of these statistics, but I'm trying to summarize them simply. Those three pipes that are coming into the panhandle are 24-inch diameter pipe, a 30, and a 36-inch diameter. So they are not all the same size. And you can see the network as they spread throughout the state.

Each one of those little blocks you see in that network are compressor stations where the natural gas is recompressed to keep it flowing down to the end users, so that's what that signifies. The blue line you see is the Gulfstream Natural Gas pipeline that start in Mobile Bay, Alabama, and ends up in Manatee County, Florida, and that has been the newest pipeline into the state. And you can see the proximity of that to all of the power plants in the state. We have shaded in green some of the areas where power plants are concentrated that are utilizing this natural gas. And you will note that the biggest concentration is there in the central Florida area, or that shaded green spot.

So with that as some background, when we look at the capacity of these pipelines, at the current time the Florida

Gas Transmission, three pipes coming in from the panhandle can deliver 2.3 BCF, billion cubic feet, of gas per day. And the Gulfstream pipe can deliver 1.1 BCF, or a total of 3.4 coming in. And if you recall back to our slide in 2006, we were importing -- excuse me, the amount of generation that was fueled by natural gas was 37 percent of our energy was fueled by natural gas. And so it has taken 3.4 BCF to do that.

In 2008, Gulfstream has an expansion, and part of their pipeline within Florida that will allow them to bring in an extra 1.55 BCF. So the total coming into the state two years from now will be roughly 3.5 BCF per day. And by 2008, 40 percent of the energy in this state will be produced by natural gas.

The FRCC has -- I'm missing something here. Well, I'll go with the flow. The FRCC has begun a study a couple of years ago to look at this. Currently the modeling is the natural gas pipeline, can it serve future generation in the state. That is something that has been historically looked at by the natural gas pipeline and the customer here in Florida, if it is a particular utility. And we depend upon the pipeline operators and planners to ensure that their pipelines can deliver what we need.

And in past years we have had them look at our plans and give us assurances that over this ten-year period that they can adequately meet our demands. As the amount of natural gas

dependency has increased, we felt at the FRCC that we need to get more involved in that assurance that those pipelines can meet our future demands and not be totally dependent upon the assurances from the pipeline operators that that is the case. And we love our pipeline operators, and we are sure they are very good, but I think that we would be remiss at FRCC if we didn't assure ourselves that this very important transportation of fuel into our region was adequate. I think we would be short-changing our process. And that is why we got involved in this.

And while we have begun -- we've worked with some expert consultants to develop a gas flow model. It is a computer model that simulates the transient flow conditions of natural gas hour-by-hour throughout time. And these are the same study techniques that the gas pipelines use when they plan and operate their system. And we finalized this model in the first quarter of this year, but we had to put the study on the backburner for a few months because of some of our transmission activities, and we just cranked it up again, and we are starting the study as we speak.

CHAIRMAN EDGAR: Mr. Wiley, from what you have described to us, are you able to obtain the information that you need for the model and to do the study that you have described? I would expect that there are probably, maybe some confidentiality issues that need to be dealt with.

MR. WILEY: Yes, Madam Chairman. We have the actual detailed data of the physical pipe system themselves. Once we get into the studies, we might -- and depending upon what we find in our initial studies -- we might need a little additional information that might be very sensitive information. And we will attempt to get that from the customers of the pipelines and from the pipelines if, in fact, our studies indicate that we need that information. So at this point I'm hopeful that we will have no problems in getting that, if we need it.

The scope of this study at the moment is that we are going to look at the summer of 2008 with the current and planned system that we have. And then we're going to go out and look at 2010. As you recall, in 2010 we get up to almost 50 percent of our energy being produced by natural gas at that time. And what we are going to do in this modeling is we are going to evaluate contingencies, just like we do in our electrical system. You'll be hearing later in our transmission studies how we test our future transmission systems, electrical systems, for outages of certain elements to see if we can withstand those outages and be reliable.

We want to do this with the gas pipelines to see if they can still deliver under some strenuous conditions, such as hot loads in the summer, the amount of gas that we need into the state. So our studies are going to look at contingencies

such as loss of some key compressor stations throughout. As you recall, looking back at this map, those blocks were the compressor stations. And if you look at that first compressor station up in the panhandle, that station has a number of compressors in it, and I forget exactly how many, perhaps it's eight. But we want to look at the loss of what if that compressor station was shut down for one, two, three days in total because of a hurricane coming through. Or what if two or three of the major compressors in that station went out, what would happen. And so we are going to be looking at those type of what ifs.

And, again, referring to this map, when you see on the red one, as you come straight down on the west coast, there's a couple of compressor stations there. And we want to look at those compressor stations and say what if a lot of compression was lost at that, can we get the gas to those units that are in that green-shaded area there in central Florida. Can we still maintain firm gas deliverability under these contingency conditions. So those are some of the things that we are going to look at.

But one of the other significant ones that we want to look at is we want to look at a hot spell, and take August. We have a hot dry spell where we have one or two weeks of very high loads. And we want to begin looking at how, if we have some single contingency outages, how could that affect the

delivery of gas during these hot spells. So those are the type of things that are interdependency study will be evaluating, and I would expect that to absolutely be finished by this time next year.

COMMISSIONER ARRIAGA: A question, please.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: There has been some conversation and some ideas about LNG. How would this effect this alternative problems that we could face in our gas distribution system? I have heard about certain ports, one in Fort Lauderdale, one in Georgia, that will bring in LNG and will probably help alleviate these contingencies. Have you heard about that?

MR. WILEY: There is an LNG, whatever they call them, plants or storage devices up in Elba, Georgia. And there are some plans to bring that into the northeast part of the state near Jacksonville. And that, in the future, perhaps, could bring some alleviation to this of having another tie-in, but the tie between that one and these gas pipelines that you now see, there is no tie involved, no interconnection, as we call them. And that could be a solution.

As you recall, there was some discussion about putting an LNG port over in the Bahamas and tying it in somewhere down in southeast Florida. Something like that could begin helping the reliability of this pipeline. But that,

again, brought on some other problems and concerns that I understand has caused that particular project to be put on the back shelf. I don't stay current on that, but I think it's on the back shelf.

But those are the only two, to my knowledge, that are kind of viable for Florida at this time. And as you might know, trying to site an LNG port anywhere on the mainland United States is just a horrendous battle in this country today. In this ten-year time period, I guess I haven't factored in that LNG is going to be a significant thing, based on what I have heard.

MR. HAFF: Ken, before you continue, I guess the bottom-line question we have is, you know, you do expansion planning for electric needs into the future. How does the FRCC assure that there is going to be sufficient gas from sufficient sources to meet the considerable increased need for natural gas to fuel the natural gas generators in the next five to ten years?

MR. WILEY: The FRCC has never got into supply of fuels, be it oil, coal, or gas. And this study is not about supplies. That's something that I think belongs in the realm of the individual utilities to worry about their supplies. Our concern came about because of how that supply is being delivered into the state. And our concern was we're planning a great transmission system and generation system, and it's

reliable, but is this pipeline system one of our vulnerabilities to electric reliability? And that's the answer that we are trying to determine.

Another interesting thing that I failed to mention on this slide is that you see the Gulfstream and the Florida Gas Transmission lines, they appear to kind of tie together, and they do at two points. Gulfstream and FGT have interconnections at two points in this system. And please correct me, George, if I'm wrong on that. And in an electrical interconnection, the electrons and the electricity can just kind of flow back and forth each way between two of the companies that own transmission. That is kind of the law of physics.

On gas interconnections, it doesn't operate this way. They are not free flowing. Whether or not one company is going to put its gas from its transmission pipeline into another pipeline is an economic, in most cases, determination between those two pipelines. Sometimes they have done it for reliability. And they physically have to go, or they do it remotely, actually, and turn a valve and they get gas to flow from one of those pipelines into the other.

The interconnections at this time in our state is that the gas can only flow from Gulfstream's pipeline into Florida Gas Transmission's. The reverse cannot happen. And one of the reasons for that at this time is that the Gulfstream

pipeline operates at a pressure here on the mainland of roughly 1500 pounds per square inch, and the Florida Gas Transmission pipeline, roughly, is in the 900 pounds per square inch. So you have a 600-pounds-per-square-inch differential. And I know the gas people are sitting back their thinking those numbers are kind of nominal numbers. They could be 1400 and 800, but you've got the concept here.

So it is very easy for Gulfstream to reduce its gas pressure from 1500 down to 900 and backhaul, as they call it, into FGT. But FGT can't send its gas to Gulfstream because the pressure is much higher, and they would have to install large compressors at those interconnection points to achieve that.

And then there are some other issues of odorization. The FGT system, which serves a lot of residential communities, they odorize their gas, so that if we smell that in our house -- if we have a leak in our house, we can smell it. It is purposefully odorized. And the Gulfstream doesn't have to worry about that and so their gas is odorless. And so that kind of presents another problem when they're interconnected, and when they backflow gas from one pipeline to the other.

And so one of the points that I failed to make back on this slide was that we can see that one-third of the gas coming into our state in the 2006 and 2008 pipeline is on one pipeline coming into this state. And obviously the chances of that particular pipe rupturing in the Gulf of Mexico are very

slim, there certainly is always the possibility, since it was built by humans. So I think there is a very interesting statistic to look at that our gas supply is dependent upon four pipes, one pipe of which carries one-third of our gas.

So these are, again, some of the reasons that we are looking at this to see if we feel that it presents future problems to us. And we obviously have not come to that conclusion, but these were some of the questions that we are putting forward.

I'm going to get on to the next area, if anybody has any questions on that.

CHAIRMAN EDGAR: I think we do.

Commissioner Arriaga.

COMMISSIONER ARRIAGA: Thank you. There was a statement that you just made that stayed in my mind. I think you said something like the FRCC does not look into supply of fuels. But don't you believe that the supply of fuels is a proportional -- influences proportionally the reliability of the system? If there is no fuel, a good resource of fuel, we may not have megawatts generated.

MR. WILEY: My prediction is that we are going to become more interested in inventories of fuels that utilities might have, such as how much oil do they have in storage, how much coal is in their coal pile at their plant. Because as an extreme example, if one of our major utilities that had coal

had a coal pile that was sitting out there, and it only had five days worth of burn in it because they were trying to save money on coal inventories, that would concern us. If they had 30, 40, 50-days worth of coal sitting in that pile, that is a good proper inventory level. And certainly that is an economic thing between those utilities and their business model and you, the Commission, in your regulatory model about how much rate-type considerations are you going to give them for having large fuel inventories sitting there. And so I think that that is a business decision between you and the companies, a regulatory business decision.

COMMISSIONER ARRIAGA: I guess I was thinking more of the need determination of a specific request. Let's say a company comes in and says we are going to put up a coal plant. Shouldn't we be asking as a Commission, based on probably some statistics that you could provide, where are you going to get your coal from, or where are you going to get your gas from? Do you have a guaranteed supply for the next 10 or 15 years?

MR. WILEY: I'm not a fuel expert, but I know that companies have departments that worry about these types of things, and there is a lot of hedging and futures involved in this. And, again, these are the kind of questions that I would highly suggest you talk to them, because they do have their fuel models and what they do. And I just don't get involved in those types of things.

COMMISSIONER ARRIAGA: I'm not trying to put you on the spot, I'm trying to educate myself. So I'm sorry if I sound like I'm pushing you or anything like that, that's not my intent. Thank you.

MR. WILEY: No, sir. The staff asked me to just summarize the status of the new coal plants that are in the ten-year projection, and if anyone had any questions on these, that the individual utility would answer any specific question. So in order to expedite things, I was just going to give you a very quick synopsis of what the companies have told us at the status.

Florida Power and Light is looking at advanced super-critical coal, which is pulverized coal. And they have completed the site study, and they are identifying other sites. And I think the message here is it appears that they are still looking.

The Gainesville Regional Utility is looking at an IGCC coal unit of approximately 260 megawatts. And they're looking at estimates on that. So I'm not sure if that is firm yet, but it's in their plan.

Progress Energy is actively evaluating two 800-megawatt coal units, and they are looking for a site and that has not been determined at this time.

Seminole Electric is looking to add a 750-megawatt unit to its existing site, and they're scheduled to have that

site certification by 2007 with construction beginning in 2008.

And then Tampa Electric is looking at a 630-megawatt IGCC plant at their existing station to be in-service by 2013, with construction beginning in 2009.

And then there is a Taylor Energy Center, which is just south of here. FMPA, JEA, Tallahassee, and Reedy Creek Improvement District are looking to be the four co-owners, and this would be an 800-megawatt pulverized coal to come in service by 2012. And I understand that they'll be looking for their certificate of need from this Commission sometime this month, construction beginning in 2008.

So that was -- if you have any further questions on it, I would ask you to direct those to the individual companies. I'm just merely reporting this to save a little bit of time and expedite this presentation.

Now we're getting into the interesting part of today, and that's our transmission planning process and our studies.

CHAIRMAN EDGAR: Mr. Wiley, we found it all interesting.

MR. WILEY: Thank you, Madam Chairman.

With the advent of the Energy Policy Act of 1992, FERC, as you know, the Federal Energy Regulatory Commission, ordered an Open Access Transmission Tariff, O-A-T-T, and everybody calls it OATT. So I hope I don't slip up and call it OATT. It was approved in 1996, and that changed the landscape

on transmission planning in this country, not just in this region. And for almost ten years we had a transmission planning process in FRCC, but it was somewhat restricted by that FERC tariff.

In 2004, we began seeing some problems with our transmission, and we're going to get into that when we discuss the Florida Central Study. And when we saw that, we decided that even though we had this FERC OATT in place, which restricted, somewhat, some coordination between companies to plant, we decide at the FRCC that we had to find a way to overcome that. And so our board took some very positive action at that time in 2005, and they approved this, quote, new transmission planning process. The objective of it was to increase the coordination of the transmission planning between the individual owners to make sure that we had a robust transmission network.

The process was going to utilize the standards that NERC applies to transmission planning and our standards, and it's going to meet the needs of all the future customers and users of the transmission system. And we would look at the first five years of our planning in a very detailed manner. And the reason for that is that the second five-year period is a little fuzzy, and we still have some time to study it, so we do five years planning in detail.

The planning committee in the FRCC, which is a

committee of all of our stakeholders in the region, are the owners of this process and are supposed to make it work. And after the study they are to identify any needed transmission projects that the owners haven't identified.

So as we study it through the FRCC process, if we see a need for a transmission line and one of the owners of a transmission system hasn't identified it, we are going to point that out, and then we're going to report to our board that here is a project which we identified as FRCC, and it's over here in this company's territory, and they have or have not committed that that is a good plan and they will adopt that.

If they say, yes, we agree with you, there is no problems. If they say, no, we disagree with you, we still report that, and we report the fact that they disagreed with the FRCC planning process. So the net effect is our board ends up approving something. And they could approve a plan that one of the members didn't particularly care for. And we do it through our governance system.

If there are any minority views expressed by anybody, those are reported and put in the report. And, ultimately, this -- well, this process is done, when we're talking about study results, in an open process. We post public notice that we are having a discussion at our planning committee, our board of directors meeting on the results of these studies, and the public is welcome to come in. And after the discussion, then

we ask them to leave for our normal business.

And this has been very innovative. It's the first time we have ever tried something like this. And we post the results on our public website at FRCC, and we send them here to the Commission. And, by the way, your staff has been very involved in this process in terms of hearing the discussion at our planning committee meetings, they attend our meetings, and they have become vocal, and they do represent this Commission's interest.

And having read the Grid Florida discussion, I know that there was some discussion that some of you Commissioners had about staff being attentive to the transmission planning in this state, and let me assure you that they are carrying out the wishes of this Commission.

And, by the way, if any member doesn't like what the FRCC recommendation does, they can request a dispute resolution, and we have a process in there that we'll actually go out and get independent evaluators to make evaluations on it. So it's a pretty open process.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: Let me stop you there for a minute. At the end of the day, one of the members does not agree, you go through the dispute resolution, still doesn't agree, is the member obligated to comply with your request? What happens?

MR. WILEY: At this point with this process, no, they are not obligated to comply with this request. Now, having said that, if the recommendation to build a transmission line was because it was needed to solve a reliability problem, in other words, meet our reliability standards, if that was the case, then we would send you a copy of that report with our board's endorsement that these projects are needed for reliability, and we would put that on your doorsteps.

Because you have the authority, and you know we almost got there today on this subject, we almost did. Unfortunately, we did not, and actually that was kind of part of that process, where we identified needs for reliability, but you are the enforcer. I don't ever see in the transmission planning arena in the next few years that FRCC is ever going to be in an enforcer position as long as this Commission has its enforcement authority.

COMMISSIONER ARRIAGA: Okay. Thank you.

MR. WILEY: Now, let's get down to the actual studies. I know that you're aware that your staff is placing a lot of reliance on the studies that the FRCC does so that they can utilize the results of those studies in their report that they will be recommending to you that is due to the Florida Legislature and the Governor next March 1st. So in that regard, we're going to discuss three of the studies that your staff, you know, do have the results of and that will play a

part in the report that they send to you to meet your legislative or statutory obligation, and those are broken down into three categories.

One of them is the ten-year transmission reliability study, then we have one we call an interregional transmission study, and then we have a Florida Central Coordinated Study. And these three reports and studies will be the basis that your staff will begin its analysis as required by the statute that was passed this year.

Looking at the ten-year transmission study, what we do is combine, once a year, all of the individual utilities transmission plans and we put them in our model. And then we jointly -- and we have a committee structure, by the way. We bring all the transmission planners together of all the transmission owners, and they jointly, with the assistance of my staff, which I have two qualified -- and I'll mention them later when we get to the Florida Central Study that assist in this matter -- and they test this state system against the reliability standards that we are required to follow by NERC and by our own standards. And at the end of the day -- well, we test those in three basic tests.

Some of the planning engineers out there are cringing with my words here, but I understand this, and if I can I know ya'll can. The first one is what we call a single-component outage where we go in and model taking a generator out, or a

transmission line out of service and looking to ensure ourselves that if that happens that there is no loss of electrical demand anywhere. In other words, you can't lose load for having a single outage.

The second area is multiple. Let's look at the outage of a couple of things, of a generator here and a transmission line there, or two generators here, or two transmission lines, or loss of something of a right-of-way that has two transmission lines on that same right-of-way. And under the NERC standards, we can lose load under that as long as it is controlled and that we can get back quickly and pick up that load. But this standard allows us to lose some load in a controlled fashion.

And then we look at extreme cases of highly improbable things, but they could happen. What if we lost the entire power plant, a major power plant, or what if we lost both 500 kV transmission lines coming into the state. And we test those, and we make sure that when those things are modeled that we don't see it cascades load into a blackout throughout the whole state. It might take out one small portion of the state, but it's not going to cascade out and cause the entire state of Florida to go into a blackout. So it's kind of a controlled area-wide blackout, not a state blackout.

And I have to admit, these are very extreme things. You know, they will probably never happen, but we do test them

and make sure that if they ever happen we have a mechanism that can control it. And we're not required to build under the standards to do anything on that, but just prudence says that we need to study that.

So that's what our ten-year study does, in short. And the net effect is that in the ten years going forward that we meet all the reliability standards with a few exceptions in the Florida central area, and I'm going to discuss that in a moment.

The next study we do is an interregional study, and this is between us and the Southern Company, which is in Georgia/Alabama. And the purpose is to look at the amount of import, what is the maximum amount of import that we can bring into Florida from the north reliably, and that's the key word, reliably. And, also, how much can we export to the Southern Company reliably.

And we do this study once a year to determine the answer to those questions. Last year's study determined that we can import during the summer months of this year 3600 megawatts into Florida reliably, and we can export 13. This coming winter we can import 3700 megawatts into the state, and we can export 17. A study is just about to be concluded. Again, looking at next summer and next winter, and we anticipate seeing the results of that shortly, but this is the ones that we have now. And, by the way, we don't expect those

numbers to change significantly at all.

MR. BALLINGER: Mr. Wiley -- I'm sorry, Tom Ballinger.

MR. WILEY: Yes, sir.

MR. BALLINGER: Just real briefly, I think I know the answer, but can you explain why there is a difference between export and import? Why the numbers vary.

MR. WILEY: John Odom works with me.

John, if I get too crazy here you might have to help me. But, basically, Tom, it has to do with the fact that there is not a lot of voltage support when we're trying to send the power to the north into the areas. And I think that's the very simple answer. And I would be glad to get my experts that understand this stuff to give you a more detailed understanding so that you can truly understand the electrical engineering aspects of it.

MR. BALLINGER: That's fine.

MR. WILEY: Thank you.

MR. HAFF: Before you go on, can I ask another question along that line. You say you study the summer and winter import and export on an annual basis. Other than adding more transmission lines between Southern and FRCC, what could cause the import and export values to change from year to year?

MR. WILEY: Well, the addition or the retirement of power plants on either side of the border that's giving you

voltage support could be one of the areas, or perhaps load growth north or south of the immediate border itself, or some transmission line additions on either side close to the border.

MR. HAFF: Thank you.

MR. TRAPP: I just can't stand it, let me jump in and ask one myself, if I might.

Ken, are you aware of anything that we could do in a cost-effective manner that would increase these capabilities? I mean, are there opportunities for additional imports that would warrant some improvements to these transmission import limits?

MR. WILEY: Bob, the only thing that I'm aware of that would give you any significant increases is to build new 500 kV lines, and those lines would have to be, at a minimum, to give you any significant increase into the state, would have to be to go down as far as the central Florida area, at a minimum, and go all the way up to the Atlanta area of Georgia before you could get any significant increase in that 3,600 megawatts. But we're talking about multi-hundreds of millions if not a billion or two dollars for something to give you more import.

CHAIRMAN EDGAR: And before you go further, I think we have a question from the bench.

Commissioner Arriaga.

COMMISSIONER ARRIAGA: Thank you. And this is for

Mr. Trapp.

You and I have discussed in several opportunities some comments made by FERC regarding our potential isolation as a peninsula with interconnection issues. This would seem to show that FERC may have a point. What would you think?

MR. TRAPP: I think Mr. Wiley can probably address it better than I, because he has had more direct contact with the Department of Energy and FERC on this matter. But it's my understanding that we currently have about 1,000 megawatts or more of available capacity on the transmission line that is currently used for economic opportunities to purchase power and to sell power to our north, but that that line is not filled up. And to the extent that the line is not filled up, that indicates to me that there is no problem in terms of a transmission constraint at the Florida border.

I think that information has been shared with the Department of Energy, who has recently, you know, done at least an initial study of potential constraint areas in the nation. And their initial draft report, based on the consultant's data that they were using, they identified Florida as one of the top ten problem areas. I think when the real information, which I think Mr. Wiley through the FRCC provided to them, was known, they changed their position on that very quickly and we are no longer identified as a real area of concern. So I think it is a matter of getting the right study done with the right

information. And my perception is that we really don't have a problem at the border.

MR. WILEY: The next item to discuss is our Florida Central Coordinated Study and Re-Study. In 2004 we began seeing some overloads on the transmission line between Lake Agnes and Osceola in our operational mode, and our planning studies had never shown that this was a possibility. And we had to sit back and ask ourselves what caused this, why didn't we see this in our planning studies? And, by the way, the overloads, we do have mechanisms to be able to back them down and get them out of the overloaded condition. So we have operational work-arounds that we employ, but we did have them.

And what we found is that, looking at our process, that every year in April everybody gives us their transmission plans, and we put them together and we test them, and we talk about them, and we end up with a working model of everybody's plans for the next ten years for the entire region. And then everybody takes that FRCC model of the transmission system and goes back to its shop and does its studies and things that it does with those studies.

And some of the things that individual companies would do, they would use that particular model to site their own generation, they would use that model to study an interconnection from a merchant plant, they would use that model to study a firm transmission request from somebody to use

their transmission. And what we found is that after our database was put together, and it is complete on June 1st ready for everybody to use, that it became a stale database. Because as you go through the months, after you put it together, people change plans because planning is a very dynamic process in every company. And those plans weren't getting reflected back in the model that all of the transmission owners were using for all of their individual study uses.

And so as you can expect, by the time you get to the 8th, 10th, 11th month, that that model has probably got a lot of things in it that were no longer anybody's plans, and yet the model hadn't been updated. So we learned a hard lesson about this stale databank. And we have since corrected that.

We now have some mechanisms in place to make sure that at least once a month that if anybody had some transmission plans or generation plans changed in that ten-year model, at least monthly it will be updated, and everyone will be notified of those changes. So now they can go back -- and the worse out-of-date would be it's only a month out of date. And so that was kind of the problem definition of how we got into what we now call the Florida Central Coordinated Study.

Initially, nine utilities got together to study this. The FRCC had just started its new transmission planning process, but these utilities didn't wait on that, they needed to get out and start looking at how do we solve this problem.

And by the time they finished that study, we found out that we had this stale database problem. And so the recommendations that came out of that initial study by these nine transmission owners was no longer valid.

The FRCC Board of Directors took very positive action when we found out about that in, I believe it was May, and they directed the planning committee to go have a re-study of this area, and they wanted it to begin on June 1st, which is when the new database model was ready, and complete that in one month. And the utilities did do that. All the transmission owners, they sent their planners to our offices and our planning staff, which is John Odom sitting next to me, who is a very qualified transmission planner, and Fred McNeil, who is -- I have to recognize Fred. Fred is truly one of the best transmission planning engineers in the state in terms of the knowledge and history and institutional memory. And we are very lucky to have them on our staff as independent transmission planners.

And so Fred and John worked with all the other planners, and one month later we came up with the recommendations in this Florida Central Re-Study. And to summarize, those recommendations were to rebuild 76 miles --

CHAIRMAN EDGAR: Mr. Wiley, I'm sorry, I hate to interrupt, but Commissioner Carter has a question, and I may have a question, too. So I'm going to ask you to slow down for

just a moment.

COMMISSIONER CARTER: Thank you, Madam Chairman.

In your earlier discourse with Commissioner Arriaga, you stated -- I think initially you stated that it costs about a billion dollars to build these 500 kV lines from Central Florida up to the Atlanta area. And as you proceeded further in your discourse, I think you said that there is no additional need in Florida for additional power. Is that where you left that, saying that there was probably no need to build that system?

MR. WILEY: No, sir, I would not want to leave that impression. I think the impression I wanted to make was that in order to increase the amount of import into the state significantly, you would have to build a line of that magnitude which would cost that much money. And I think then that does become an economic question as to it. From a reliability point of view, the lines that we now have we are operating very reliably with them, and we do not need that extra line for reliability purposes. But perhaps one of these days there might be an economic advantage to building that line, and we don't get into that arena.

COMMISSIONER CARTER: Thank you.

MR. WILEY: The Florida Central Study basically said let's build 76 miles, rebuild them, and let's construct 78 miles of new lines. And the study went on to recommend that on

some existing right-of-ways, where we're going to be tearing the existing lines down and building up new lines, that we should build those lines for a capacity of 3,000 amps, which is 1200 megawatts, versus 2000 amps, which was 800 megawatts. So that's the way our study recommendations went, because we felt that looking at some of the economics at the time of the study that was a prudent thing to do was to build all lines at 3000 amps. And this is just a geographic representation of some of the lines that we discussed in our study. And I won't go into that, but I wanted you to have it for your reference.

And so when we looked at the 3,000-amp lines, if all of those lines were rebuilt and are built at 3,000 amps, the total project cost of this down in the right-hand corner was $417 million. The next step we took was to obtain commitments for everybody to build each of those projects and to conduct some more detailed engineering evaluations and detailed cost estimates. And we began very extensive negotiations with all the parties that were involved. And one of the issues in the negotiations was, on one of the lines, was to build that line at 2,000 amps or build it at 3,000 amps. And I'm not going to get into all the details, but let me say that the net results of our negotiations were that one of the lines that was in question, which is owned by OUC, that Orlando went back and did some detailed field studies, engineering studies, and determined that the line that we were holding them responsible

to build, that they could accomplish building a 2,000-amp line for $33 million. And that was a very significant cost differential between what our original estimates were and -- as a matter of fact, it was a $140-million difference between that. And so after seeing that we could accomplish what Orlando's proposal was in a sooner time frame, we could begin getting this line and portions of this line in service earlier than projected in the prior estimates, we accepted their proposal as being a very sound proposal, and that is that they would rebuild their line -- excuse me, they would reconductor their line and have some portions in service by June of 2008.

CHAIRMAN EDGAR: Mr. Wiley, what were the time frames, approximately, for the two different cost estimates, and can you tell us a little bit about what the reason is for the significant difference.

MR. WILEY: The cost estimates were developed in the -- they originally began looking at them in the first study that the nine utilities made, so I'm sure they started looking at them then. When we got involved in our re-study, which was June 1st, and we began putting things to paper, and that's when we first saw these numbers, so I think that the numbers were probably developed in the first half of this year, let's put it that way. And the entire study focused on the fact that the line on that particular right-of-way was going to be rebuilt. I think there was some assumptions going in by the engineers at

that time that they probably couldn't increase the capacity of the existing line.

And what Orlando did, before they brought this to the service, is they got their consultants out over a period of months to actually do field surveys on this line and look at it and to come back with an expression to OUC, can this line be reconducted. Can we do something less than tear it down and rebuilding it. And that particular study was reported to us approximately a week and a half ago when their consultants came back and said, yes, we can reconductor that line, and we can have 2,000 amps capability in that line. So that particular cost estimate was about a week and a half old to us.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: A few slides back -- you don't have to go back, I'm just going to remind you. I think you said that it is prudent, or prudent considerations suggested that a 3,000-amp line should be built. I guess you are now approving, your board is approving a 2,000-amp line. Is that less prudent -- still prudent, but less prudent?

MR. WILEY: Yes, sir. We felt that was very prudent. When the board made the recommendation to go to 3,000 and approved that recommendation,. the cost difference between a rebuilt line at 2,000 and 3,000, that cost difference was $65 million. Which 107 million to build a 2,000; 165 -- excuse me -- 73 million to build it. So that was an increase of 61

percent. And the board knew this and they said it is still prudent to do that, because you're going to use up that right-of-way forever by what you are doing. When Orlando came back with this $33-million solution, then now you are talking of going from $33 million for a 2,000-amp solution to 173 million. Well, that is a 424 percent increase in cost to achieve 50 percent more capability. And that just was not an economical prudent thing to do. And that's why the board did have a meeting and they did readjust their recommendation to take this into account, that they felt that the $33 million was the prudent thing to do. And the good thing about that is this particular right-of-way is still preserved at this time. At some point in the future, if there is a rebuild necessary, it can still be done, because they are using existing structures and not destroying the right-of-way.

COMMISSIONER ARRIAGA: And that brings me to the next question, your last comment. Let's put ourselves three or four years from now. Are we going to be facing, because of this decision now, an overload situation in the same line three or four years from now?

MR. WILEY: I can't say with a surety that you're going to or you're not going to. Sometime in the next five-year period, you could be facing that. When I say five years, five years after this study period. So sometime after 2012, in that next five-year period, you could be doing this.

But this planning thing is so dynamic that there could be, you know, we're talking of some other rather large transmission lines in this region, in this area. And if that comes to fruition, that could make this problem go away entirely. But right now that's speculation, and those aren't, quote, plans. That's talk right now and thinking. But, yes, you could do that.

But when I look at it, when I look at the fixed cost of a $170-million investment, you know, if you were to use, you know, 18 percent annual fixed cost, for 173 million, that is almost 25 to $30 million a year to support that. I used to be an engineer in economics back in my very, very young days, and if I can spend $30 million today to stave off an investment five years, and that new investment would have cost me almost $30 million a year, that's kind of -- in an engineering economy point of view, that is kind of a no-brainer. And so that's kind of the way I looked at it personally. That was a very personal comment right there, and not FRCC.

COMMISSIONER ARRIAGA: And I'm very sensitive to the economic reasoning that you are putting forth, but at the same time I look at the other companies. They're building up to 3,000 amps. Isn't that costing them that kind of money at the same time? I mean, I'm just trying to figure out the prudence issue here. We are allowing one company to go down in its standards, but the other companies are building to 3,000.

What's the difference?

MR. WILEY: I've asked Progress Energy, and I know Sarah Rogers is here today to talk for them, but I think she wouldn't mind me saying this. I asked her that question, what are their incremental costs based on their engineering estimates. And her incremental cost on her rebuilds and her new line is in the area of 15 to 20 percent. And I would ask you to ask her that question, but these are the ranges she was talking about. And that is in the area of prudency. You just -- why not throw another 15, 20, or 25 percent in to get 50 percent more capability. But when you are looking at 400 percent, that's a difference. And so I would really like for you to ask the utilities that, because I don't want to put words in their mouths.

COMMISSIONER ARRIAGA: Okay.

CHAIRMAN EDGAR: Mr. Wiley, I think we have one more question, or more than one.

Commissioner Carter.

COMMISSIONER CARTER: Thank you, Madam Chairman.

You were saying why would you spend that amount of money for a 50 percent increase in capacity. Did you juxtapose that against the increase in the percentage of demand over that same time frame?

MR. WILEY: I think I understand --

COMMISSIONER CARTER: You're talking about going to

the 2,000-amp versus the 3,000-amp and you said that that would have been a 50 percent increase in cost. I was asking you did you juxtapose that against the percentage increase in demand over that same time frame. Do you understand that?

MR. WILEY: I think I do, Commissioner Carter. I guess what I would say when I'm looking at demand, you're not talking about the total demand in the region, you're talking about the actual flow or the demand flow on that particular transmission line.

COMMISSIONER CARTER: Madam Chairman? Let me kind of break it down where I'm going to here. You were talking about a standardization for prudence for a 3,000-amp capability, right? We're there, right? And you said that in order to do that for, I guess it would be the utility that went to 2,000 amps, that would have been a 50 percent increase in cost.

MR. WILEY: A 50 percent increase in capacity of the line.

COMMISSIONER CARTER: Capacity.

MR. WILEY: Yes.

COMMISSIONER CARTER: Oh, so it would be a 50 percent increase in capacity, but how does that increase of capacity -- that means instead of increasing the capacity by 50 percent, you reduced it by 50 percent, but how do you juxtapose that against the percentage of demand? I mean, this is probably one of the fastest growing areas in Florida, wouldn't you agree?

MR. WILEY: Well, yes. The Orlando area is; yes, sir.

COMMISSIONER CARTER: And this is Orlando we are talking about?

MR. WILEY: Yes, but I can't relate one-for-one the growth of demand in the Orlando area to the transmission loading on that particular line. That would be very hard to do. So, I guess I can't answer your question, because I don't know.

COMMISSIONER CARTER: Okay. That's fair. Thank you.

MR. WILEY: I'm sorry, sir.

COMMISSIONER CARTER: Thank you.

MR. WILEY: Madam Chairman, unless you have more questions, I'm not going to go through any of the other slides on the Florida Central Study. I think you know the net result is that the FRCC feels that all the lines have been committed to by the companies that we feel meets the reliability needs through 2012 in this area.

CHAIRMAN EDGAR: Let me see if we have got some questions. I think we do have some from our staff.

MR. HAFF: Yes. Thank you.

I guess the one thing I keep thinking about is the Central Florida Study just went out to 2012, in my understanding, and I guess the transmission system additions under the Re-Study for Orlando looks like between 2008 and

2011. So I guess in my mind you're just finishing the upgrade to 2,000 amps by 2011, and you have only studied out to 2012. And my understanding is you are going to study out the full ten years starting the end of this year the beginning of next year, is that correct, you will go out the full ten years?

MR. WILEY: Next year we will go out that far, that's correct.

MR. HAFF: And I guess, I don't know if I'll call it concern, but what if you go out beyond 2012 and it's shown that these exact lines that you have just upgraded to 2,000 amps are overloading in, say, 2013, and you just completed upgrading to 2,000 amps. Aren't we back to where we started and having to go back and look at rebuilding the lines that we just finished upgrading?

MR. WILEY: Mr. Haff, yes, that is a possibility. My staff has looked at this, they have gone out and projected two more years out to 2014. And we haven't seen anything that concerns us using the model that we have today. Now, as you know, everybody puts new plans in continuously. And I guess our only expectation would be that any new transmission plans that we're going to get in the next one or two years is going to help the situation, not harm it, in terms of pushing the problem out to future years.

MR. BALLINGER: Madam Chairman, may I?

Mr. Wiley, I had a question. Would it be fair to say

that a lot of this problem is because of the bulk of generation being built in Polk County and Hardee County where there are sites available, and the load being in the Orlando/Kissimmee region?

MR. WILEY: That's certainly one of the major contributing factors.

MR. BALLINGER: And if we see generation plans, for example, nuclear units or something of this nature, large base load plants possibly again in that region, is that going to exacerbate the problem, does it look like? Or is there something we need to look at in a need determination when the utility comes in?

MR. WILEY: I think if any additional generation is located in that tri-county area that you certainly need to make sure that the transmission associated with that generation addition does not aggravate this problem. And we will be looking for that, also.

MR. BALLINGER: Okay. Thank you.

MR. TRAPP: If I might, Chairman.

CHAIRMAN EDGAR: Mr. Trapp.

MR. TRAPP: Mr. Wiley, I want to get clear for the record what some of this discussion was just about in response to Mr. Haff's questions. It's my understanding that the FRCC has committed to specifically look at the Central Florida area again in the years beyond 2012, and that that review will take

place expeditiously this spring, I believe?

MR. WILEY: That's correct, Mr. Trapp.

MR. TRAPP: So we are going to keep our eye on this problem with respect to the reliability impacts?

MR. WILEY: We absolutely are going to keep our eyes on this. And I think when we get to my last slide, you're going to hear more about this.

MR. TRAPP: Oh, I'm sorry, I didn't know you had not gotten to your last slide. Maybe I should stop and let you get to your last slide.

CHAIRMAN EDGAR: But before you do, you mentioned earlier in your discussion on this item, Mr. Wiley, I think in May you used the phrase "due to a stale database." Could you speak to that a little bit more and what steps have been taken so that we won't have a stale database in the future to do analysis with?

MR. WILEY: Our transmission models, we know everybody's plans and what they plan to build. We know their existing system and we know their additions and deletions for the next ten years. We have listed all of those additions and deletions that they have noted line item by line item. And every month we -- well, we are expecting each company that if any of those projects change, the data when they are supposed to come into service has been changed, or the project has been eliminated, or something new has been added, we expect them to

notify us immediately. And we will notify all of the people using this database, hey, here is the new database with these changes.

In order to ensure that everyone does this once a month, we will be polling each of these people and saying, hey, we haven't heard from you, do you have any changes to your database. And we hope that we will get good feedback from that, but we are not counting on that solving it. Each month when our planning committee meets, we are going to give our planning committee what I call a report card that says, here are the projects that were changed or added. And by the way, we didn't get any changes from these transmission owners, and we are going to list them.

And we are going to be on record in our minutes of who did and who did not make changes and when they made them. So that if we get down the road and we find out that somebody made a change six months ago and didn't report it, that we can hold them accountable in some manner for the fact that they didn't report their changes. So these are the steps that we have taken.

The other step that we have taken is that you know that under the OATT that people can request firm transmission service or interconnections with any transmission owner. And when that request comes in, they are required, each company is required to post that on a website, a public site, which they

call OASIS, and every week we collect all of those OASIS requests, and we ship them out to all of our members so that everyone is aware of what everybody's request is, because things that happen in that request could change the database also. So these are two of the measures that we have already implemented.

CHAIRMAN EDGAR: Commissioner Deason.

COMMISSIONER DEASON: Mr. Wiley, I have a question, maybe it's a broader question, and if now is the time to answer it, fine, if not we can maybe address it later. But the question is this. There is an interplay -- you would agree there is an interplay between the siting of cost-effective generation and the availability of transmission infrastructure to support that generation. I mean, that's just, I guess, Engineering 101 there.

Now, the question that I have is if there is a scenario where a case can be made for the siting of a cost-effective base load unit in a certain location, but for that unit to be constructed there and to provide reliable dispatchable energy into the system there needs to be an upgrade in their transmission line. But the transmission line is owned by Utility B and the generation is going to be owned by Utility A. Now, does the FRCC get involved in that type of situation to look at what I would call optimal planning and how, if there needs to be cost sharing under that scenario, or

just explain to me what those procedures are and how that particular -- if that particular scenario were to arise, how the FRCC would work to try to make it cost-effective for the state of Florida, or at least for peninsular Florida as a whole.

MR. WILEY: Currently, we do not. Currently, the scenario would be that the generator owner who was trying to site that, it would run studies using the FRCC database to determine what the optimum solution was for them, and does that impact any other transmission owner. And they make that determination, and then they contact the other transmission owner that they think might have been impacted, and then those two get together and study it and determine who's going to do what and who's going to pay. And that is how the existing mechanism works.

COMMISSIONER DEASON: Does that process work well, or has there ever been the need to elevate that to the FRCC or else -- or no?

MR. WILEY: Commissioner Deason, I'm going to save that as my last slide to tell you where the FRCC is going.

COMMISSIONER DEASON: Thank you.

MR. WILEY: Madam Chairman, I'm trying to get to my last slide. I'm sure you're tireder than I am.

Bob talked about the DOE's congestion study, and he asked me if I would say a couple of words about it, but the

Energy Policy Act of 2005 required DOE to run a study to determine if there were any major congested transmission corridors. The preliminary results were shared with the FRCC and a day later with your staff by the Department of Energy personnel. And in discussing it with us, they told us that our interface with the Southern Company was one of the more problematic corridors in the eastern interconnection.

And when I saw those words, I just told them I didn't think that was the case. I kind of live here, and it's our business, and, of course, I'm looking at it from a reliability point of view. And I said I just don't think that is true. And I think if you leave that statement in there, you know, I'm going to have FERC down here in Florida, and we and our Commission, you know, like to keep FERC in Washington, and we need to talk about this. So we did. And we had a lot of dialogue and correspondence back and forth with DOE to try to show them that they had made some erroneous assumptions in the study that said that we were the more problematic interface.

And I'm happy to report that the results of our point out of some of these erroneous study assumptions, that the final report did not indicate that our interface was a significant issue. And we, Bob and I, think that that issue has been put to bed for the moment with FERC -- with DOE. But I do want to remind you that the law requires DOE to run this study every three years. And I would hope that the FRCC in the

future when I'm not around and your staff will bird-dog DOE to make sure that their next study doesn't have any erroneous assumptions in it again.

Very briefly, Bob wanted me to talk about two new studies that we are going to be doing, and one is the Taylor Energy Center. Currently, the participants in the Taylor Energy Center have asked Progress Energy, you know, to study how are they going to interconnect that plant to Progress' Energy, and Progress Energy and Florida Power and Light are affected parties, and they are looking at that. And when those two companies and the participants in the Taylor Energy Center boil down to what the best couple of alternatives are that they are considering, at that point in the process that study is going to come into the FRCC transmission process, and we are going to, through that process, assure that it meets all of our reliability standards. So I did want to report that that is going to be happening and hopefully by the end of this year.

The next study that --

MR. HAFF: Ken, before you finish, I'm sorry, I have a question.

The need filing for this unit is due here in a couple of weeks. And I guess I'm just wondering is there a preliminary assessment of what the transmission cost is going to be as an associated facility for the need for this power plant?

MR. WILEY: Michael, I have not got involved in that at all at this point. Michael Kurtz, who is the project manager for this, is here today. And if you would like, you can ask him that later. He said he would be glad to talk about anything to do with it.

MR. HAFF: Yes, I would.

MR. WILEY: The other study that has been in limbo for awhile is what we call the Northwest Florida Transmission Study, and that was a study between Progress Energy, Seminole, and the City of Tallahassee. And that was put on the back burner when the Taylor Energy Study began. And we just wanted to report to you that that has not gone away, and it will be studied after they determine what transmission is necessary for this new Taylor Plant, because that probably is going to have an impact on the Northwest Florida Study. So I just wanted to let you know that that is still on the back burner and will be resurrected.

And now the last slide is what are we going to do given what we have been through these past few weeks and months on the Florida Central Study. Well, let me say some of the things that we have talked about here about when do you get a transmission request for firm service, when does that get into the FRCC transmission planning process. If someone is going to build a generating plant, when does the transmission part of that get into our transmission planning process? How early do

we do that?

I will be presenting a proposal to my board in the coming month to materially enhance our transmission planning process. And the net of this proposal is going to be that early on, and we're not sure what that means yet, but very early on that the utilities would bring their transmission planning process into the FRCC arena. And we wouldn't just sit back and wait for them to say here are our plans, and here are the firm transmission requests that we have granted, and we're going to start bringing all of that into this process very early. And I feel that we're going to get there very shortly with this type of an enhanced process.

I have the commitments of the major, of some of the major transmission-owning companies in the state, from the CEOs, that we need to get there and we are going to get there. And so that is one of the more important things that our organization is going to be doing in the coming months is to enhance this process, and I am shooting for a deadline by the end of this year that that process is in place in our region.

So that was kind of an answer, Commissioner Deason, to yours. Some of these things, siting of a plant or granting a firm transmission is going -- if my proposal wins, and I think it has got a 99 percent chance of winning, it's going to come into our process in a very transparent manner early on. And realizing that the utilities still have to deal with the

FERC open access transmission tariff. I mean, that's obviously some boundaries we are going to have to live within. But if we find that that becomes a deterrent to what we think is the right thing to do, we will march on FERC and say, hey, this is better than you and what you have got, we would like go to have some exceptions. And so that is the genesis of what we are looking at going forward.

The other thing --

MR. HAFF: Ken, I'm sorry, before you leave that point, would you envision the enhanced transmission planning process as a supplement to what the individual utilities do or sort of taking over some of that role from the utilities, or how would you envision that working?

MR. WILEY: I envision that these individual plans will come into an FRCC process much earlier, and that we have an independent professional transmission planning staff. As a matter of fact, we plan on adding another one next year, that would give us three. And that we would work with all of the individual company transmission planners through our process and with our subgroups to do these studies. Obviously, the FRCC cannot make final decisions on an OATT request, but we can certainly make sure that we are at the table and seeing that the studies are performed correctly, that all of the affected parties are involved in knowing what the results are and being able to comment on them if it impacts them, and that it is an

open and transparent process within the transmission planners arena.

So that's what it is looking like, and those are my thoughts. These are not my board actions at this time, but I am encouraged by talking with members of my board that we can achieve this.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: Let me go back for a minute to the Slide 48, would you, please. This brings me back to the 2,000-amp issue that I have been talking about, because I'm still a little bit confused. The line that goes from McIntosh to Lake Agnes to Osceola to Taft, who are the users, the transmission users on that line? Is it fair to say it is Orlando, Tampa Electric Company, Progress Energy, all of them use that line?

MR. WILEY: I think you could roughly narrow it down that the predominant users would be Lakeland, Orlando receiving power out of its Macintosh Plant over there at Lakeland. Some of the power generated down in the West Lake Wales region would be generated by Seminole, Progress Energy, by a merchant plant down there, and some of that would flow on that, so you have a number of users that would be on that line. And I might add vice versa that that same statement could apply or would apply to any of these other lines that connect those two areas.

COMMISSIONER ARRIAGA: The red and blue lines?

MR. WILEY: Yes, sir.

COMMISSIONER ARRIAGA: So there is mixed use here. And we are allowing one line to be built at 3,000 amps, and that seems to be prudent. And the cost associated with that rebuild seems to be prudent and reasonable. But all of a sudden they become unreasonable and probably imprudent because of economic factors, and we allow the 2,000-amp line. I just don't see the reasoning. I'm not clear. And I know we're trying to accommodate economic factors which are very important because we don't want the ratepayer to pay more unnecessarily, but my question then would be is the ratepayer paying more unnecessarily on the 3,000-amp line, because the same company is using both lines?

MR. WILEY: Which company is using which line is a very sticky issue. And it's one I'm going to discuss as one of my last points here in a moment. As you are well aware, the historical thing has been if your line is overloaded or needs to be fixed, you fix it. And I might add, historically, if you have to do something on your system to build or rebuild a line, you look at it and everybody does, what is the economic way to do that. And they do make those decisions individually. And everybody is using everybody else's line in this state to some degree. We just have never really studied exactly how much under what circumstances. And this is very -- and I'm not trying to be evasive or anything, but how power flows on

transmission line is an extremely technical concept. Even I who used to be in the business of doing that, I lose it a little bit every now and then.

And that brings me to my last point, that we are making decisions sometimes of one company doing something that impacts another system. And it might not overload another systems line, but it does add to the loading on it, which eventually could lead to overloading. And that's one of the base arguments that we have been involved in lately is who causes the overloads on lines, transmission lines, and if you are causing a problem, shouldn't you be caused to pay for the problem, since you're causing it.

And so this issue of who causes the problem and who should pay for the problem because of their use is truly a knotty issue. And we call that cost sharing. And one of the things that my board will be acting on is to, we have established a cost-sharing methodology task force to try to find a solution to this problem. It's a very knotty one, and it's not going to be an easy one to solve. And they are going to be directing our cost-sharing task force to work in earnest to try to come up with something over the next year. Because if we don't develop one, we can have the best transmission planning process in the world over here, but when it gets down to the question of who's going to commit to pay for it, we could be right back to where we almost were today. And we

don't want that. We never want to bring anything to this Commission's doorsteps for you to make our decisions.

So we are going to work our hardest to come up with a cost-sharing methodology and to resolve this issue. And as many of you know, the Grid Florida Transmission Proposal would have solved that problem, but there were a lot of other, as you know, concerns in that whole thing. And I'm not saying that I thought that Grid Florida was a good thing or a bad thing because I was ambivalent about it from an FRCC point of view. I might have had some members on different sides of that equation, I'm not sure. So, anyhow, those are two things that our board is going to be taking action on in the near future, and I'm hoping to report back to you some very successful results by the end of this year.

CHAIRMAN EDGAR: Commissioner Tew.

COMMISSIONER TEW: Thank you, Mr. Wiley. I had some questions about the OATT process that you had mentioned and that if it became an impediment to your enhanced transmission process, that you might find a need to march on FERC, as you said, I think. And I just wanted to ask you that if that does become an impediment and if this process is put in place that you will let us know, perhaps, through an Internal Affairs type process. I know that you are in constant discussion with our staff, but perhaps even elevate it and let us know, so that even if we don't march with you, we are prepared to support

that effort or at least file some kind of comments in support of that.

MR. WILEY: Absolutely, we would do that, Commissioner Tew. And we would probably be coming to you first asking you to march with us, if we ever got to a point like that. As you know, I believe, this Commission and your staff and the FRCC have always been in lockstep on actions before FERC over the past few years.

COMMISSIONER TEW: Thank you.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: Thank you, Madam Chairman.

You were asked by staff earlier about the Taylor Energy Center. You said you had staff with you. I presume these gentlemen here would want to address that, so maybe we could get an answer to that question.

MR. WILEY: Yes, sir. This is Michael Kurtz, he is the project director.

MR. KURTZ: Thank you. The project participants, all four participants, have members who are very active in the FRCC transmission planning process. And the members both from their own system perspective as well as for the project will continue to be active participants in the FRCC transmission planning process. The studies are going on, as Ken mentioned, with Progress Energy and Florida Power and Light's involvement, as well, and we have identified in our project budget what we

believe is sufficient funds to integrate the project into the Northwest Florida region. But it doesn't mean that there may not be options that become available both to the participants and other people with existing facilities in that area to make improvements to that area of the state of Florida.

As your staff knows, and as the Commission knows, there have been some identified areas, as Ken alluded to, generally in the northwest area in the Tallahassee region. And we believe that the construction and bringing on line the Taylor Energy Center in this electrical area of the state will improve the flows in that area of the state, that it will be neutral on state imports and exports, but that it will improve some of the flows in the Tallahassee area, will improve voltage control in that area of the state by increasing the reactive power available, and should generally be good. And will, in fact -- the last two slides that Ken had talk about both the Taylor Energy Center and the northwest studies that are being done -- will be beneficial for that, and it is probably a good idea to wait and some of the northwest studies to be done until after we get the work done for the Taylor Energy Center integration.

I will be happy to answer any other specific questions.

CHAIRMAN EDGAR: Mr. Haff.

MR. HAFF: Do you have an estimated time of when the

Taylor Energy Center transmission studies will be complete?

MR. KURTZ: With me is Gary Brinkworth, as many of you know, with the City of Tallahassee. Gary is also the Chairman of the Taylor Energy Center Transmission Committee. We believe the specific studies on the path that we are on that will identify costs are probably in the February time frame.

MR. HAFF: I guess, as you know, you will be filing your need filing in the next week or two with a hearing in December for this project. And I'm just trying to get a handle. If you don't know what you are going to need to build, do you have a handle on how much it may cost? Is there an upper limit to the range of estimated cost for the transmission improvements associated with this project?

MR. KURTZ: The project participants have not set a specific upper limit on transmission investment, and we would have to evaluate that when those studies are completed, and we intend to do so. We have no reason to believe that they would be excessive, based on what we know, based on our own independent studies.

CHAIRMAN EDGAR: Any further questions?

Commissioner Deason.

COMMISSIONER DEASON: A question for Mr. Wiley. First of all, let me say I applaud the efforts and the fact that FRCC is going to be more involved in the transmission planning process and that you are moving forward with

developing a cost-sharing methodology. I think those are all very positive steps. I think it is an enhanced role for the FRCC that I think can and probably will be very beneficial for all involved, particularly end-use customers in the long run, which I think we are all here concerned about. That's why we go through this process is to make sure there is going to be adequate reliability. And that we not only are going to have a reliable system, we are going to have one that is economic, is economically efficient.

But the question that I have is that -- and I believe in an answer to a previous question you indicated that the FRCC does not have the ability to obligate a particular member to take a certain course of action, but that you can report the information, and that this Commission under -- you didn't say this, but I'm going to say it and I was wondering if you agree with it, that this Commission under the Grid Bill has the authority to require infrastructure upgrades. Is that your understanding?

MR. WILEY: Yes, sir, that is my understanding. And I can assure you that is the understanding of all the transmission-owning facilities, that you have that jurisdiction when transmission is needed for reliability purposes. And that is what we are talking about here, is reliability purposes.

COMMISSIONER DEASON: And you coordinate the studies, you provide the information, and if there is an impasse and

information is provided, it would be up to this Commission to actually open some type of docket. It wouldn't be the FRCC petitioning this Commission to do one thing or another, is that correct?

MR. WILEY: That's correct.

CHAIRMAN EDGAR: Mr. Haff, did you have a question?

MR. HAFF: No.

CHAIRMAN EDGAR: No. Okay.

Mr. Wiley, thank you so much.

And I'm going to look to our staff. Can you give a feel for about how much longer we have on our set agenda?

MR. HAFF: Thirty to 45 minutes, probably, at the most.

CHAIRMAN EDGAR: Okay. Commissioners, what is your pleasure? I think it's time for a least a short break. We can take a short break and come back and push through, or we can go ahead and take a lunch break and come back after lunch to finish our agenda. And I can go either way, so I'm going to look for the will of the body.

COMMISSIONER DEASON: A short break.

CHAIRMAN EDGAR: A short break, yes. Either way we're going to -- we're going to give Mr. Wiley the chance to stretch, as well. Okay. Then let's go ahead and go on break, and let's come back at about five after by the clock on the wall, and we will then continue our business and push through

until we finish. Thank you. We're on break.

(Recess.)

CHAIRMAN EDGAR: I think we're ready to get started again. We'll go back on the record.

MR. HAFF: We're going to hear first from Schef Wright representing Orlando Utilities Commission, and afterwards, in order, Progress Energy, Sarah Rogers, and Tampa Electric, Ron Donahey.

CHAIRMAN EDGAR: Mr. Wright.

MR. WRIGHT: Thank you, Madam Chairman. Good afternoon, Commissioners, staff, and everybody else. I'm Schef Wright and I have the privilege to be here today speaking on behalf of the Orlando Utilities Commission. Also present from the OUC are Thomas Tart, Vice President and General Counsel of OUC. Tom has been with OUC more than 25 years. Byron Knibbs, Vice President of Energy Delivery for OUC, Keith Mutters, Director of System Planning and Reliability, and Aaron Staley, Manager of Transmission Planning for OUC. Hopefully they have educated me to where I can answer just about all of your questions, but if it gets real technical, they're available to answer questions.

As Mr. Wiley's presentation showed, following the FRCC's Florida Central Coordinated Study and Re-Study, OUC conducted further engineering analyses and engaged in continuing discussions with all directly affected parties

relative to the McIntosh to Taft corridor. Through our analysis, we identified the Lakeland/Taft through -- hold on. Okay. I touched a key that I did not know I touched.

CHAIRMAN EDGAR: We've all been there.

MR. WRIGHT: Through these studies and discussions, OUC identified the Lakeland-to-Taft corridor reconductoring project as the best option to address the issues relative to that corridor. As background, portions of the Lakeland-to-Taft corridor are congested today. However, there are no NERC or FRCC violations. We have, with the FRCC, implemented what we call operational workarounds to address these problems. These affect and involve the cooperation of a number of utilities to handle the situation. But, again, we have no NERC or FRCC reliability criteria violations. As I mentioned a minute ago, this has been a part of the Florida Central Coordinated Study and Re-Study.

The map, which is the second page in our presentation, shows the corridor in relation to the other major transmission facilities in the area. We are having some technical difficulties with the screen, but I think you all have hard copies. So if you look at the map, the purple highlighted section is what we call the McIntosh-to-Taft corridor or the Lakeland-to-Taft corridor. We use McIntosh and Lakeland interchangeably, because McIntosh is the power island for the Lakeland Electricity Department, and so that's what we

are talking about.

We've got four segments here. At present, and I will talk about this more in a moment, the McIntosh-to-Lake Agnes segment is planned to be reconductored in 2011. The Lake Agnes-to-Osceola segment is planned to be reconducted in 2008; Osceola to Cane Island in 2009; and Cane Island to Taft in 2010.

Now, as I said, these or the planned dates based on the current construction schedule. This schedule is based on currently projected loadings on the lines with the idea of addressing those that appear more likely to be more congested sooner as early as possible. We will, of course, optimize the construction schedule to the maximum extent possible, which means we could reorder some of the segment reconductoring projects based on other available workarounds and other developments.

The reconductoring project will be engineered and constructed by OUC and paid for by a combination of OUC, the Florida Municipal Power Agency, Kissimmee Utility Authority, and Tampa Electric Company. We have stepped up and addressed this problem. Our solution meets and exceeds all NERC and FRCC reliability planning criteria, yet offers the opportunity for the earliest possible fix. As I mentioned, we will have segments completed beginning as early as 2008. Whereas, if you were to look at Mr. Wiley's Slide Number 44, you would see that

the earliest the segments would be completed on the full rebuild to 3,000-amp project would have been in 2010, notwithstanding earlier projected needed dates.

As Mr. Wiley's presentation showed, this is definitely the most cost-effective alternative by a whopping margin, and it is effective. It satisfies all of the applicable reliability criteria under severe contingency scenarios, not just single component contingency scenarios, but under severe contingency scenarios for the whole planning horizon.

And our study, there was some discussion about 2012, we have done studies to the extent we can through 2014. As Mr. Wiley said, the database is somewhat more -- maybe less robust is the best way to put it, after 2012, and because there are a lot of unknowns out there, generation locations and other transmission projects that will effect everything after probably 2011.

There will be some required outages on the line as we reconductor it, and this will require the cooperation from a number of utilities. Naturally we will participate to the maximum extent possible with all of our assets and resources to do that. The project has been begun. We completed a condition assessment of the facilities in the corridor, an engineering feasibility study, and preliminary or conceptual engineering studies. We are poised to begin the detailed engineering for

the project by the end of this year, and to have the first segment done in 2008.

I'll be happy to answer any questions.

CHAIRMAN EDGAR: Mr. Haff.

MR. HAFF: It's our understanding at the Commission staff level that the emergency rating of the McIntosh/Taft corridor was, I guess, reduced down to the normal operating level recently. And that, in turn, may have caused some of the projected overloads in the region. Are you familiar with that?

MR. WRIGHT: Basically, yes. My understanding is that there is an A-rating and a B-rating. And that we know what the identified A-rating, which is what might be called normal on the line is, and I believe that is 444 MVA, and that the B-rating is something like 563 MVA. We have never supported the use of the B-rating as the long-term, as any kind of long-term planning rating.

MR. HAFF: Would you support the use of an emergency rating for testing for contingencies on this or other adjacent lines that may be overloaded?

MR. WRIGHT: I'm going to need to ask one of our engineers that question. My understanding is that emergency means emergency, but let me ask one of these folks.

MR. HAFF: Bring them up to the table, it's fine, if you like.

MR. MUTTERS: In addition to the issue on A or B

rating --

MR. HAFF: Would you identify yourself, please.

MR. MUTTERS: Keith Mutters, Director of System Planning, OUC. In addition to the issue brought up about A or B-rating, the real issue that has come up on that corridor is the physical condition of the line. There have been questions with that. There have been connections that are deteriorated. We had to make a decision. And our ground clearance issues, how much clearance between ground and the conductors at maximum sag. So we made a decision for public safety reasons that we needed to back off that B-rating to the A-rating. The continuous rating of the line has never changed, it has been at 444 MVA, but we did back off on the B-rating.

MR. HAFF: After reconductoring, will the B-rating be raised back up to -- I guess it will be a new level because reconductoring will increase the capability of the line. Will you go back to having a different A and B rating at that time?

MR. MUTTERS: When the line is reconductored, and we're going to pursue through the FRCC the question of the B-rating and how it is defined and utilized. We will have a normal rating and an emergency rating for the line.

MR. HAFF: I think Mr. Wright may have answered this already, but the existing line, or at least segments of the line between McIntosh and Taff will have to be taken out of service to do the reconductoring, am I correct there?

MR. MUTTERS: That is correct.

MR. HAFF: I guess I'm curious how you see OUC being able to operate the Florida Municipal Power Pool being that McIntosh is one of the units that would be affected by this line segment being out of service. How would OUC operate the power pool with line segments out of service between McIntosh and Taft?

MR. MUTTERS: The pool has multiple generation resources to dispatch. It always has to be considered as a contingency that that corridor is out of service and the generation is dispatched in the pool to meet the load. We will certainly look at, for this corridor, outages will be taken in the fall and the spring, probably from October 1st through May 1st time. To take this corridor out through summer loading or heavy winter loading is not really an option. So it will be at lighter load periods, and the resources will be coordinated for dispatch.

MR. HAFF: I guess you have determined that you have looked out through 2014, and that OUC doesn't at this time project there to be any lines which would be in overload status by 2014 with the 2000-amp rating, is that correct?

MR. MUTTERS: The original study and the re-study went through 2012. OUC on its own looked at an additional two-year period, and in doing that looked at the ten-year plans, and you have to make some assumptions on location of

future resources in that time period. But in our own assessment of 2013 and 2014, the line at 2,000 amps meets all reliability criteria.

MR. HAFF: For contingencies as well as steady state?

MR. MUTTERS: For all reliability criteria.

MR. HAFF: Reconductoring, I guess, uses the existing H-frame transmission towers that are currently in place is my understanding, is that correct?

MR. MUTTERS: Yes. There are two-pole H-frame structures which were built down the middle of the corridor, 135 feet.

MR. HAFF: I guess if the FRCC's long-range transmission study that they are going to perform early next year determines that this corridor will, once again, have some, I guess, reliability aspects at 2,000 amps, I take it you're going to have to go do something else, and I'm thinking that something else would be tearing it down and reconstructing to a higher amperage at some point in time. And I guess I wanted to get your opinion on whether that's the case?

In other words, how would you increase the capacity of that? After reconductoring, how would you increase the capacity further in that corridor if the FRCC or your own ten-year transmission study shows that you need more capacity above and beyond the reconductoring?

MR. MUTTERS: Well, physically you can only do so

much on those existing wood structures. I mean, originally we didn't even consider a reconductor as an option, the planners didn't even build that in as an option or alternative. To go from the reconductor to additional capacity, you've got to build totally new structures. And since the existing H-frame are down the middle, it's a coordination problem. To get the new structures in, try to maintain the existing line in service, it's a big, big step to go from reconductor to a total rebuild. But that's the next step. And you're no worse off doing the reconductor today and upgrading the corridor in the future than you would be if you did it today.

MR. HAFF: Okay.

MR. MUTTERS: You still have to take that giant leap at some point to get those new structures in to the side of the existing structures and then you just have to rip out the old line and trash it.

MR. HAFF: Would segments of the old line have to be taken out of service to provide sufficient clearance in the right-of-way to build the new structures, if required?

MR. MUTTERS: I'm not going to get too deep into the engineering, but the span lengths of the existing structure, between the existing structure are such that you can't put the new structures in and energize the existing line without making some modifications. You can't operate both at the same time.

MR. HAFF: I had a few more. I didn't know if you

wanted to break for any other questions.

CHAIRMAN EDGAR: Go right ahead.

MR. HAFF: This feels like cross-examination.

CHAIRMAN EDGAR: But it's not.

MR. HAFF: It's friendly, yes.

MR. WRIGHT: We're all on the same team.

MR. HAFF: Thank you, Mr. Wright. We have heard that there are some operational measures that can be performed immediately, that I guess are taking place immediately prior to the projects in the Central Florida Study being completed. And I'm assuming that operational measures would include something like uneconomic dispatch to balance generation and load in certain geographic regions.

Could you briefly describe how that works? I mean, my understanding essentially is you have to dispatch out uneconomically to keep stability in certain regions when there is an overload of a transmission line.

MR. MUTTERS: I cannot go into great detail in the operational, but there is redispatch as part of the workarounds. When you are throw in the uneconomic, that is a judgment issue determining whether it's uneconomic or not. The fact is that there is redispatch from south to north to positively impact this corridor. There is also a reactor in this corridor that can be implemented as another stage of the workaround.

MR. HAFF: Do you have a feel for the amount, I guess, of capacity or energy that is being affected by the redispatch of generation to work around these transmission contingencies? Do you have a feel whether it is increasing -- I assume it is, but I'm just asking you, and do you have a feel for the amount and maybe the possible cost differential of these workarounds?

MR. MUTTERS: Within the re-study reports, it did quantify some potential redispatch. I do not remember those numbers exactly. I think it is around 50 to 200 megawatts in the near term potentially, and something greater than that in the outer years. Economically, I could tie no number to that.

MR. HAFF: But, I guess, from Orlando's point, or from OUC's point the only unit -- if there was an overload in the line that would probably need to be taken out of service would be McIntosh, or the redispatch would be -- McIntosh would have to be taken down and something east of the corridor would have to be increased to maintain stability, is that correct?

MR. MUTTERS: No, you can't limit it to one unit. There are multiple units that affect this corridor and the other corridor that is parallel to it.

MR. HAFF: Okay. That's all I was going to ask.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: It's to Mr. Haff. The line of questions that I was just listening to, questions and answers,

I may have interpreted the whole thing wrong, but I was getting the feeling that you don't seem to be too satisfied with the solution that has been presented. You pointed out so many issues, problematic issues to the solution, I just wonder how you feel for this. What's going on?

MR. HAFF: I guess my concern is that we are going to -- and he has actually satisfied a lot of the concerns I had. I guess I'm just thinking ahead to beyond 2012 and beyond 2014. It seems from an engineering perspective that you may have to tear it all down that you have just reconductored and redo it anyway. But as Mr. Mutters just said, you're going to have to do it now or do it later. And as discussed earlier, I think, in the workshop, the value of saving the capital expenditures now and saving, you know, the carrying costs of the capital expenditures is such that it makes economic and engineering sense to go on and reconductor and just essentially postpone the ultimate need for new towers and new lines.

COMMISSIONER ARRIAGA: So it is your perception that sometime down the future, maybe none of us will be here, this issue may come up again and we will be talking about 3,000 amps and we'll be talking about $400 million?

MR. HAFF: I believe you're right, Commissioner. As far as when, you know, it will be sometime down the road. And not just in this area, but in other areas of the state, as well. You know, as the state continues to grow, other

utilities in other regions of the state are going to be looking at the same issue of whether to rebuild or reconductor. It just hasn't risen to the level of a reliability concern as it has at this time in central Florida.

COMMISSIONER ARRIAGA: Thank you.

CHAIRMAN EDGAR: Mr. Wright.

MR. WRIGHT: Madam Chairman, if I could, I would like to respond briefly to Commissioner Arriaga's question.

CHAIRMAN EDGAR: Yes.

MR. WRIGHT: Mr. haff's line of questioning, which was entirely fair and we're happy to answer them, like I said, we are all on the same team, really was predicated on a what if. It was what if the line should become overloaded at some point in the future. And as we've been talking about, the robustness of the database beyond 2011 or 2012, at the outside, is not real high. And there are at least as many what ifs that could completely obviate the need for any further activity on the McIntosh-to-Taft corridor down the road.

It's a highly interdependent system, which is the gist of everything everybody, Mr. Wiley and others have been talking about all morning and into the afternoon now, and it's highly interdependent on current loads, projected loads, future generation location decisions, much of which is not known, and future transmission projects. There are a good number of what ifs out there that would completely obviate the need for any

future activity or at least within 15 or 20 years on the McIntosh-to-Taft corridor. It could happen.

We deal with these kind of things. Could you construct a scenario where something would have to be done before 2014? Yes. Are there a bunch of potential, realistically potential scenarios where you don't have to do anything until 2024? The answer is also yes.

CHAIRMAN EDGAR: Mr. Ballinger, did you have a question?

MR. BALLINGER: No, ma'am. I got clarified by Mr. Trapp.

CHAIRMAN EDGAR: Thank you very much. Mr. Haff, did you conclude your questions?

MR. HAFF: Yes, ma'am, I did.

CHAIRMAN EDGAR: Okay. Thank you. Any other questions or comments for Mr. Wright and his experts? No. Okay. Thank you very much to each of you.

MR. WRIGHT: Thank you, Commissioners.

MR. HAFF: Progress Energy is up next, and I'm going to make sure we can see their slide show.

COMMISSIONER CARTER: Madam Chairman.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: May I make a statement while they are adjusting?

CHAIRMAN EDGAR: You may.

COMMISSIONER CARTER: I was really looking through the report given my Mr. Wiley, the presentation this morning, and I was really encouraged by these conservation measures that have been taken. And I think that that is -- we talked about a lot of other issues, but I was really impressed with the amount of megawatt and demand that we were able to -- and power we were able to save just through conservation. And that's something that, you know, is really -- I think the Commission in its wisdom over the years -- and he has a historical chart here, and I think that is something that is impressive and I look forward to working as we continue this great legacy.

CHAIRMAN EDGAR: I fully expect that line to keep increasing.

COMMISSIONER CARTER: Thank you.

MR. GLENN: Madam Chairman, my name is Alex Glenn representing Progress Energy Florida, and I wanted to introduce two individuals who can answer hopefully any of your questions. Sarah Rogers, our Vice-president of Transmission, and Sam Waters, our Director of System Resource Planning. So, to the extent that you may have any questions regarding generation, Sam would be happy to answer those.

Sarah.

CHAIRMAN EDGAR: Thank you.

MS. ROGERS: Thank you. Good afternoon. Thank you for allowing us to speak. Progress Energy supports the new

FRCC enhanced planning process, and clearly the process is working. It has identified issues that were unknown to the utilities involved prior to this planning process. We applaud the FRCC for taking on this responsibility of transmission planning within Florida. We believe that this new planning process has and will continue to provide opportunity for the electric companies in Florida to better understand and recognize the needs of the transmission grid.

We believe that the FRCC is the appropriate venue for Florida's transmission planning process, and we appreciate the FRCC for taking this on. The new transmission planning process where all companies meet together to discuss both transmission and generation plans for the future has resulted in a more comprehensive view of the transmission needs for the state than was available previously. The new information afforded through this new join planning process has resulted in a number of transmission project schedules to be adjusted to better meet the needs flowing out of the new information obtained as a result of this process.

Our company supports the FRCC's Central Florida Transmission Plan, or the Florida Central Coordinated Plan. I get mixed up on the exact name on that. We support it as approved, including the OUC proposal to reconductor the McIntosh/Taft corridor. We believe that this plan will benefit all of Florida electricity consumers by ensuring greater

reliability during planned and unplanned outages.

Progress Energy is committed to making the upgrades approved in the Central Florida Study to assure our compliance with NERC standards and the provision of reliable electric service to all Florida customers. We will do this by recognizing and managing the many uncertainties of siting transmission in Central Florida, including the complexities of land acquisition. Equally as important is assuring that the stakeholders have an opportunity to participate in the siting process and to assure the reliability of electric service during the coordination of line outages during the construction.

This chart shows the lines that Progress Energy has committed to and whether they are new or rebuilds. We are in the process of engineering on these lines. Some are under construction. We believe that the new planning process has resulted in a more global view of the transmission grid than we had in the past. We have modified our plan as a result of the new information made available through the planning process and we look forward to participating on a going-forward basis in the enhancements of the planning process as well as participating in the future cost allocation methodology task force.

And that concludes my remarks. I'll be happy to address any questions that you may have.

CHAIRMAN EDGAR: Thank you, Ms. Rogers.

Commissioner Deason.

COMMISSIONER DEASON: I have a question on the last page, the chart there. The needed in-service dates and the planned in-service dates, could you explain the difference in the time frames and how that affects reliability and compliance with NERC standards.

MS. ROGERS: Yes, I'll be happy to. Progress Energy identified the West Lake Wales to Intercession City lines as needed when we brought on Hines 5. So, essentially, the addition of Hines 5 generation in Polk County triggered the need for these lines. And as the Hines 5 in-service date moved, so did the in-service dates for these lines. By participating in the FRCC planning process, we realized through this process that these lines were needed before Hines 5, and they were needed immediately. So we're doing everything we can to expedite the in-service dates of these lines.

Unfortunately, with the West Lake Wales to Intercession City lines, those must be built sequentially. We cannot take out the West Lake Wales to Intercession City line to rebuild it without first building the new line and then tearing down the old line and building the second circuit.

In addition, within our previous plans, the Avalon to Lake Agnes line had not been identified. We'll be needing to acquire right-of-way for that line, and it also fall under the

TLSA process which typically adds a minimum of two years to the overall construction process, or engineering and construction process. So during that time frame we will have to continue with some operational workarounds.

COMMISSIONER DEASON: And with those workarounds, there's not going to be any violations of NERC standards, is that correct?

MS. ROGERS: That is correct.

CHAIRMAN EDGAR: Mr. Haff.

MR. HAFF: Just a couple of questions, Ms. Rogers. To follow up on what Commissioner Deason was pointing out on the in-service dates of the lines, you mentioned about the West Lake Wales and Intercession City having to be done sequentially. I just wanted to get a feel, I guess. I was going to ask you why are they staggered out. I guess it's a manpower issue of not being able to build them all at once, but --

MS. ROGERS: No, it's not.

MR. HAFF: It's not it at all?

MS. ROGERS: No, it's an operational issue. The system cannot withstand having the line out the entire time to rebuild it. We can't do both construction projects simultaneously from an operational standpoint. It doesn't have anything to do with resources or availability of resources.

MR. HAFF: I guess I was going to ask essentially why

not just reconductor the line to 2,000 amps. Is the incremental cost to reconductor to 3,000 amps small enough that it justifies reconductoring to 3,000 amps, or rebuilding to 3,000 amps?

MS. ROGERS: Well, we have looked at that and we are in a very different situation than OUC. The existing structures on the West Lake Wales to Intercession City line are not robust enough to handle the additional weight of the 3,000-amp constructor. Therefore, we have to -- or 2,000 amp conductor. Therefore, we have to rebuild that line. When we rebuild the line, the incremental cost of the structures to hold 2,000 amps to 3,000 amps is very marginal. So when we look at the cost from Progress's perspective, the difference between rebuilding at 2,000 amps and 3,000 amps is the incremental cost of the structure and the difference in the conductor cost. It's a very different situation than what OUC is facing.

MR. HAFF: And just this one last question. I will ask you the same thing I asked Orlando. Do you have a feel for the amount, and I guess the dollar value of the workarounds that are required prior to these lines entering service?

MS. ROGERS: I do not. These would occur in limited instances. And it has been my experience with the utilities that we represent up in the north, in North Carolina and South Carolina, that operational workarounds are not an indication of

imprudence. Sometimes it can be more prudent to do an operational workaround than to actually rebuild lines.

MR. HAFF: Thank you.

CHAIRMAN EDGAR: Commissioner Arriaga.

COMMISSIONER ARRIAGA: I just want to follow up on what you were talking with Commissioner Deason. And you knew that you needed transmission lines before 2008, and now we see 2009, '10, and '11. I didn't understand your answer. How did it get to that?

MS. ROGERS: We didn't know we needed them before 2008. Prior to --

COMMISSIONER ARRIAGA: So who knew? I'm sorry, this needed in-service before 2008, who knew?

MS. ROGERS: Before the FRCC planning process, no one knew. By the utilities coming together and modeling our systems as one, we identified these seams issues, and it was at that time that it was identified that these lines were needed before 2008. And prior to that, when we were planning through our own models, these lines were needed much later on with the in-service date of Hines 5, a gas-powered generator in Polk County.

COMMISSIONER ARRIAGA: And you are able to determine today that there will be no reliability issues as asked by Commissioner Deason when the planned in-service dates are realized. How do you know that you will not have congestion

problems and outages and things like that?

MS. ROGERS: We know that because we are able to identify operational workarounds which mitigate the possibilities of overloads or congestion.

COMMISSIONER ARRIAGA: I have heard operational workarounds. Can you explain that to me, how does that work?

MS. ROGERS: That is redispatch of generation.

COMMISSIONER ARRIAGA: So you have that studied so that no congestion problems will occur?

MS. ROGERS: That is correct.

COMMISSIONER ARRIAGA: Okay.

CHAIRMAN EDGAR: Mr. Ballinger.

MR. BALLINGER: A procedural question. Do you have any estimate of when you may be filing for a transmission line siting need application?

MS. ROGERS: As soon as we can. Actually, Tampa Electric and Progress Energy are working together to do that filing of need and to go through the process together since we will each own portions of that line.

MR. BALLINGER: If you could contact me or someone in our office, because we only have a 60-day time limit to have a hearing, and hearing dates are hard to find. So when you have an idea, please let me know.

MS. ROGERS: Certainly.

MR. BALLINGER: Thank you.

CHAIRMAN EDGAR: Mr. Haff.

MR. HAFF: I was just going to say if there are no other questions we could go on to the next presenter.

CHAIRMAN EDGAR: Okay. I see no further questions, so thank you all. I appreciate it very much.

MR. GLENN: Thank you.

MR. DONAHEY: Good morning, Commissioners. My name is Ron Donahey. I am Managing Director of Grid Operations for Tampa Electric, and I have with me Greg Ramon, who is in our regulatory department. Greg is going to drive for me so we can get the slides accomplished quickly.

First, I would like to say relative to the Florida Central Coordinated Study, that Tampa Electric supports the recommendations that are in that study. Tampa Electric believes that the OUC proposal is a good outcome of the process that we have been through. We believe that it meets the NERC and FRCC reliability requirements at least through 2012.

Another point that we think is significant as we evaluate the OUC proposal is the ability to meet the original needed in-service dates that we were just talking about on Progress' slide, at least for that corridor that Orlando and TECO are a part of, and that obviates the need for many of these operational workarounds if we can meet that schedule. So we think there is great value to that in addition to the capital costs that have been talked about before.

Tampa Electric has committed through this study to spend 27.7 million to date, according to the estimates that we have on the projects that we are involved in. We are involved in two projects. First, the Tampa Electric/Progress Energy tie line between Lake Agnes substation and the new Gifford on Progress' system. We have for a long time been a partner with OUC on the Lake Agnes to Osceola line segment, 230 kV line segment, and also a small segment that goes beyond Osceola towards Cane Island, but not all the way to Cane Island. Both of these segments are a part of what has been referred to here this morning as either McIntosh to Taft or Lakeland to Taft.

The ownership percentages on these segments that we are involved in, Tampa Electric owns 25 percent of the line and OUC owns 75 percent. In terms of project planning and the schedules that are needed, and the way we see making schedules right now, on the TECO to Progress Energy corridor, right now the best estimate we have is in-service June 2011. That's for the entire line. This is a tie line between the two of us. Tampa Electric will own the portion that's in its service territory, Progress will own the section that is in its service territory, and we have to obviously meet at a common spot. So our schedules have to be very coordinated. The whole need process through the TLSA, we need to coordinate the filings that are a part of that. So we are joined at the hip working through this process and we have gotten that kicked off.

As far as the TECO to OUC section, again, we are involved in two of the four segments. We believe that the new proposal allows us to meet the needed in-service dates and we will be working with Orlando to continue to engineer that and to try to assure that the right sequence of projects are done to minimize the mitigation and operational needs in the state.

And actually, a schedule was recommended by this study and to our best knowledge that is the schedule we will follow. But obviously we will be reevaluating that as we move through time, as OUC has already reported to you.

In conclusion, we believe that the Florida Central Coordinated Study recommendations should be deemed appropriate and that the parties should proceed as planned in constructing the needed facilities. Tampa Electric, as many others have said, really support the new and evolving transmission planning process. In fact, I have the privilege of being chairman of the planning committee and some responsibility to make sure that that works under the leadership of Mr. Wiley and our board.

We also believe that planning on a peninsular-wide basis has identified further FRCC areas for improvement, and particularly we think the cost allocation issue on a generic basis is one of the things that we need to address in that process moving forward. So that concludes my remarks, if you have any questions.

CHAIRMAN EDGAR: Thank you, Mr. Donahey.

Any questions from our staff? No.

COMMISSIONER DEASON: I have a question.

CHAIRMAN EDGAR: Commissioner Deason.

COMMISSIONER DEASON: I think you indicated that TECO would be participating on two of the four segments between McIntosh and Taft?

MR. DONAHEY: That's correct.

COMMISSIONER DEASON: How did you determine that there was only two, and how did you determine which two? Depending upon your location of your generation, or how does that work?

MR. DONAHEY: The way it was determined on this recommendation was based on ownership. We currently own 25 percent of the Lake Agnes to Osceola section and 25 percent of the Osceola almost to Cane Island, about halfway to Cane Island, we own part of that transmission line. And so we have agreed that any violations in the future, you know, would reflect on us if we were not a part of that project and resolve that problem, so we feel an obligation to correct any violations, and we believe this accomplishes that.

COMMISSIONER DEASON: So the obligation goes to the owner of the transmission line, but there are questions of cost allocations?

MR. DONAHEY: I think that's a fair statement.

CHAIRMAN EDGAR: Mr. Donahey, thank you very much.

MR. DONAHEY: Thank you.

CHAIRMAN EDGAR: Okay. That concludes our scheduled presentations and discussions.

Is there anybody here who has not addressed the Commission who would like to?

Seeing none. Mr. Haff.

MR. HAFF: Thank you, Madam Chairman. Just a couple of closing comments. We bring a report to you for -- it comes from the Commission, we are scheduled to bring it to you on December 4th at Internal Affairs, the annual review of ten-year site plans. The report is statutorily due to the Department of Environmental Protection, Department of Communities Affairs by 12/31. I will also add because of the new statutory requirement about the transmission study for next March, a good portion of what we know up to the date of this report will be included in this report, as well. And then, of course, we'll bring the other report to you early next year.

CHAIRMAN EDGAR: Commissioners, any questions about those next steps, or any closing comments? Seeing none. Any further items that we need to address at this time?

MR. HAFF: None that we are aware of.

CHAIRMAN EDGAR: Okay. Then thank you all for coming and for your participation. We are adjourned.

(The workshop concluded at 12:56 p.m.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk and Administrative Services, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 19th day of September, 2006.

JANE FAUROT, RPR
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